

INTERNATIONAL SEARCH REPORT

International application No. **11-SE-060**

PCT/US03/2

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B32B 15/04, 31/18, 31/20; C04B 35/645; H01M 2/14, 2/16
US CL : 156/89.12, 89.16, 250, 256, 278; 264/650, 663; 429/129, 142, 144, 247

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 156/89.11, 89.12, 89.16, 250, 256, 278; 264/603, 604, 614, 650, 663; 429/30, 32, 129, 142, 144, 158, 160, 247

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---------------|--|---|
| X --- Y | US 5,290,642 A (MINH et al.) 01 March 1994 (01.03.1994), entire document. | 1, 4, 6, 13, 15-17, 21-23, 25, 27 ----- 2, 3, 8, 9-12, 14, 24, 26 |
| X --- Y | US 5,256,499 A (MINH et al.) 26 October 1993 (26.10.1993), entire document. | 1, 4, 5, 13, 15-17, 21-23, 25, 27 ----- 2, 3, 9-12, 14, 24, 26 |
| Y | US 4,913,982 A (KOTCHICK et al.) 03 April 1990 (03.04.1990), column 10, lines 4-7. | 13-17, 21-27 |
| Y | US 2002/0081475 A1 (SIMPKINS et al.) 27 June 2002 (27.06.2002), paragraph [0034]. | 2-4, 9-12, 18, 24 |
| X | US 5,171,645 A (KHANDKAR) 15 December 1992, (15.12.1992), entire document. | 1, 13, 16, 21, 22, 27 |
| X | US 5,898,008 A (KOLKER et al.) 27 April 1999 (27.04.1999), entire document. | 13-15, 18-20, 27 |



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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Date of the actual completion of the international search

07 December 2004 (07.12.2004)

Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

PCT/US01/017

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | US 5,298,469 A (HAIG et al.) 29 March 1994 (29:03:1994), entire document. | 21, 23, 25 |